

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 180 AND BUTTERFLY LANE IN FREDERICK COUNTY. THE IMPROVEMENTS INCLUDE UPGRADING EXISTING LOOP DETECTION TO VIDEO DETECTION AND NON-INVASIVE PROBES AT THE INTERSECTION. MD 180 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULL TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR EASTBOUND MD 180. MD 180 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THERE IS AN OVERLAP RIGHT TURN PHASE FOR WESTBOUND MD 180. THERE ARE NO PEDESTRIAN PHASES FOR ALL THREE LEGS OF THE INTERSECTION.

EQUIPMENT LIST FOR CONTRACT NO. XX3555168

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM	QUANTITY	UNIT	DESCRIPTION
9086	1	EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
8006	1	EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT PER ASSIGNMENT
8007	3	EA	VIDEO DETECTION CAMERA & CABLE
8011	125	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - BORED
8013	100	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - TRENCHED
8018	2	EA	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
8019	4	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE

C. EQUIPMENT TO BE REMOVED.

ALL EXISTING SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL.

CONTACTS

Mr. John ConCannon  
Assistant District Engineer - Traffic  
Phone: (301) 624-8140/8141

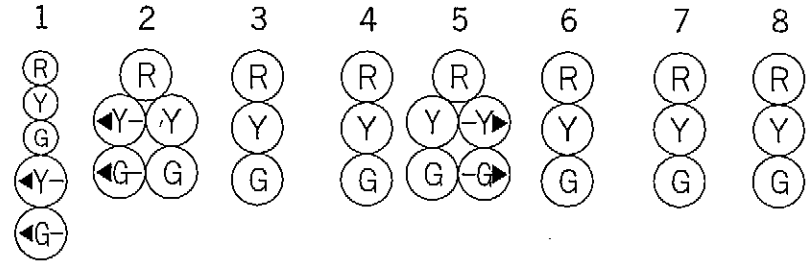
Ms. Susan Palmer  
Assistant District Engineer - Maintenance  
Phone: (301) 624-8105/8106

Mr. Andre Abend  
Utility Engineer  
Phone: (301) 624-8115/8116

Mrs. Corren Johnson  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

Mr. Ed Rodenhizer  
Supervisor, Signal Operations  
Phone: (410) 787-7650

PHASE CHART

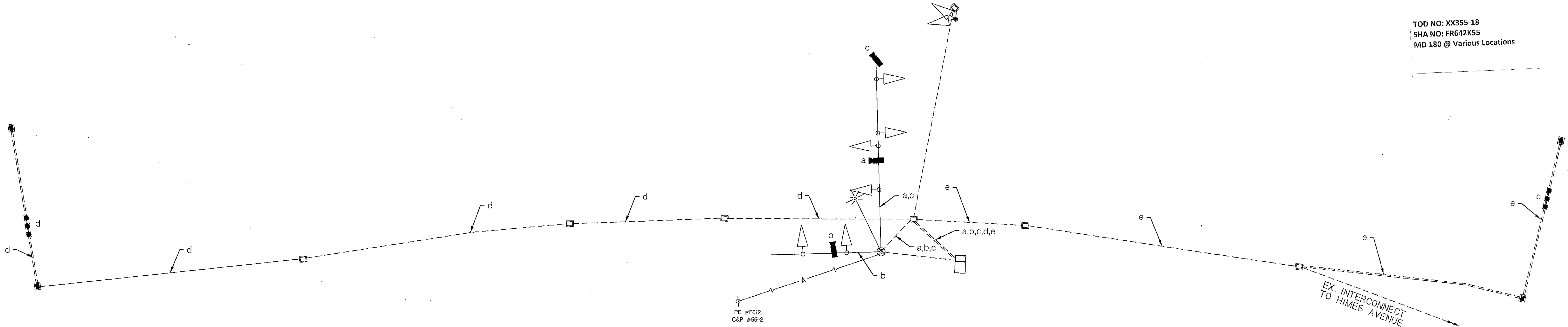


PHASE 1 AND 6	←G/G	←G/G	G	R	R	R	R	R	↑
1 AND 6 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	↑
PHASE 2 AND 6	G	G	G	G	G	R	R	R	↑
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	↑
PHASE 4	R	R	R	R	R/G→	G	G	G	↑
4 CHANGE	R	R	R	R	R/Y→	Y	Y	Y	↑
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	↑



MD 180 IS ASSUMED TO RUN  
IN AN EAST/WEST DIRECTION

WIRING DIAGRAM



WIRING KEY

a,b,c } VIDEO CAMERA CABLE  
d,e } NON-INVASIVE CABLE

TOD NO: XX355-18  
SHA NO: FR642K55  
MD 180 @ Various Locations



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 180 (JEFFERSON PIKE)  
AT BUTTERFLY LANE  
FREDERICK, MD

GENERAL INFORMATION PLAN SHEET

SCALE NONE ADVERTISED DATE 06/2013 CONTRACT NO. XX3555168

DESIGNED BY CW COUNTY FREDERICK  
DRAWN BY CW LOGMILE 10018014.31  
CHECKED BY RM TMS NO. L432  
F.A.P. NO. TOD NO.

TS NO. 3549-B DRAWING SG-2 OF 4 SHEET NO. 2 OF 2



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PLOTTED: Wednesday, May 22, 2013 AT 02:06 PM  
FILE: P:\09-002 TEDD\Task 125 MD 180 @ Various Locations\Drawings\CADD\Working\Butterfly Lane\p55-1003\_M108@BL.dgn

BY: fanyong -